1. Rejection of Claims Under 35 U.S.C. § 112, First Paragraph

In the Office Action, claims 6-10 and 12-14 were rejected under 35 U.S.C. § 112, first paragraph, for allegedly being non-enabling for the specific cancer cells disclosed. In support of this rejection, the Office Action states that the specification does not enable a person of ordinary skill in the art to use the invention commensurate in scope with the claims.

In our telephone conversation of December 9, 2002, Examiner Goldberg recommended amending the claims to limit the claimed method to the treatment of cancer cells that are sensitive to the combination of the photochemotherapeutic compounds and the photoactivating light, in order to overcome this rejection. In accordance with the Examiner's recommendation, Applicant has amended claim 6 to include the limitation that the cancer cells being treated are those which are sensitive to the phototoxic effects of the photochemotherapeutic compounds. Thus, Applicant believes that the amendment to claim 6 overcomes the Examiner's rejection under 35 U.S.C. § 112, first paragraph, and respectfully requests that this rejection be withdrawn.

2. Rejection of Claim Under 35 U.S.C. § 112, Second Paragraph

Claims 7-9 were rejected in the Office Action under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention because the term "in vitro" in claim 7, the term "in vivo" in claim 8, and the term "ex vivo" in claim 9 fail to find basis in claim 6 as amended.

Applicant respectfully notes that support for the rejected phrases can be found in the specification as filed on page 3, lines 23-25. Applicant further notes that the limitations introduced for the first time in dependent claims 7-9 are not required to have a basis in the independent claim from which they depend. For this reason, Applicant respectfully requests that this rejection be withdrawn.

3. Rejection of Claims Under 35 U.S.C. § 103(a)

Claims 6-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over two journal articles authored by the inventor of the pending application. The Office Action concludes that the teachings of these two articles would provide ample motivation to one of skill in the art to use crystal violet in combination with light in the photochemotherapeutic treatment of cancer in vivo. However, the Office Action also points out that the cited references fail to teach time limits for the exposure of the photochemotherapeutic agents to the light.

In our telephone conversation of December 9, 2002, the Examiner recommended amending claim 6 to include the limitation that the mixture of cancerous and non-cancerous cells containing the photochemotherapeutic compound is exposed to light for a period of up to 90 minutes, in order to overcome this rejection. Claim 6 has been amended in compliance with the Examiner's recommendation. Therefore, Applicant believes that claim 6, as amended, is in condition for allowance and respectfully requests that this rejection be withdrawn.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully requests that the Examiner reconsider and withdraw the pending rejections. If Examiner Goldberg has any questions or believes a telephone discussion would expedite the prosecution of this application, he is invited to contact the undersigned.

Respectfully submitted,

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Date: March 20, 2003

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CLAIM AMENDMENTS

- 6. A method of selectively killing cancer cells or inhibiting growth of cancer cells in a mixture of cancerous and non-cancerous cells, the method comprising:
- (a) contacting the mixture of cancerous and non-cancerous cells with an effective amount of a compound having the structure:

wherein each R and R' is independently selected from the group consisting of hydrogen and methyl groups, and further wherein the compound exhibits preferential uptake by the cancerous cells compared with the non-cancerous cells, and still further wherein the cancerous cells are sensitive to the phototoxic effects of the compound; and

(b) exposing the mixture of cancerous and non-cancerous cells from (a) to light of a suitable wavelength to photoactivate the compound for up to 90 minutes, wherein the compound exhibits selective phototoxicity toward the cancerous cells over the non-cancerous cells.